UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,143	03/13/2001	Hajime Enomoto	826.1696/JDH	8633

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DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 March 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>04/04/01</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claims 1 – 10 are presented for examination.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1.   Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,895,459 (refer as 459). Although the conflicting claims are not identical, they are not patentably distinct from each other because both computer systems comprise substantially the same elements. The differences between the patent no. 459 and this case is the claimed process models have the functionality of the object model, and it describes more details the relationships between nodes and branches. It would have been

obvious to one of ordinary skill in the art in fact that the process model and object model

both have the same capabilities, they just have different labels.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 1 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

a. The following terms lack proper antecedent basis:

i.   the object model – claim 1;

b. The claim language in the following claims is not clearly understood:

i.   As per claim 1, lines 10- 14, it is not clearly indicated how an object

model on line 14 is different than the object model mentioned on line 10 (i.e., is

the object model comprising many models including an object model). If they are

different models, they must have different names; lines 18 – 19, it is not clearly

indicated where "a plurality of object models" refer to, (i.e., are these object

models different than an object model).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1, and 3 – 8 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Cheng, US patent no. 6,067,548 in view of Immerman, US

patent no. 6,574,617.

5.   **As to claim 1,** Cheng teaches an information processing apparatus, having an

object network as a language processing function and a common platform as an

interface function with clients, for executing processes using an interface with

concerned parties of the process and / or an environment, comprising:

the object model (enterprise, fig. 3 and col. 4 lines 49 - 60) having a hierarchical

structure (the model relationships is established in sub-group to another, col. 9 lines 18

– 25) composed of:

a data model (data model, col. 4 lines 58 – 60 and col. 7 lines 60 – 65) represent

an attribute structure as a set of templates;

a role model (role model, col.1 lines 52 – 65 and col. 6 representing the content

of a process to be executed in the environment as a set

of a plurality of object models; and

a process model (process model, col. 1 lines 52 – 65 and col. 4 lines 49 – 60)

defining a dynamic process cooperatively executed by a plurality of role models as one

process.

Cheng does not explicitly teach which model has a highest level in a hierarchy,

and object model.

Immerman teaches a hierarchy of models having a highest-level model

(abstract).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Cheng and Immerman's system

because Immerman's level models would clearly organize the level of each model in the

hierarchy and also assign one model in the hierarchy to be an object model.

6.   **As to claim 3,** Immerman teaches the steps comprising of a process function

kernel portion for executing a controlling process (client operating system run the

application .....exe col. 34 lines 8 – 22) performed with an intervention of a user of the

information processing apparatus using the name of a concerned party for the process

of the object network and the name of a work performed by the concerned party.

7.   **As to claim 4,** Cheng teaches the steps of wherein the data model, object

model, and the role model are statically defined (statically defined roles, col. 2 lines 38 –

42), and wherein the specifications of the process model are dynamically (dynamic, col.

5 lines 45 – 65) defined so that the validity of the process performed in the set of the

plurality of object modes is assured corresponding to a consistency constraint entity

defined as an attribute of an object.

8.   **As to claim 5,** Cheng teaches the steps of wherein an inconsistent constraint

entity corresponding to the process model describes a validity predicate about the

validity of the process and a control state for executing the process (state, col. 3 lines

30 – 35 and col. 5 lines 5 – 15).

9.   **As to claim 6,** Chen teaches the steps of wherein the hierarchical structure

further the hierarchical structure of a reference model (reference model, col. 3 lines 40 –

45 and col. 6 lines 40 - 45) for accomplishing a basic service to be executed in the

process of the object network, the reference model being orthogonal to the hierarchical

structure of the data model, the object model, the role model, and the process model.

10.   **As to claims 7 and 8,** it would have been obvious to one of ordinary skill in the

art to recognize that the concerned party of the process and the process function kernel

portion of the information processing apparatus use a reference driving function so as to

accomplish a service of the reference model because the kernel needs to know which

model or function it refers to.

11.   Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cheng, US patent no. 6,067,548 in view of Immerman, US patent no.

6,574,617, and further in view of Pandit, US patent no. 5,937,402.

12.   **As to claim 2,** Cheng and Immerman does not explicitly teach the steps of

wherein the object model has:

        a format model representing a pattern of a noun object and a verb object;

        a feature model representing a feature of the object corresponding to an attribute

value of the object and having a constraint condition corresponding to the environment;

        an object network model having a graph structure of which the name of the noun

object is represented as a node and the name of the verb is represented as a branch.

        Pandit teaches the steps of

        a feature model representing a feature of the object corresponding to an attribute

value of the object and having a constraint condition corresponding to the environment

(the object model .... Constraint servers to establish the relationship for both the

objects, col. 9 lines 35 – 55);

an object network model having a graph structure of which the name of the noun

object is represented as a node and the name of the verb is represented as a branch

(col. 9 lines 45 – 52 and col. 10 lines 40 - 45).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Cheng, Immerman, and Pandit's system

because Pandit's constraint condition would provide a valid selection of data and

reliable data.

13.   **As to claim 10,** Pandit teaches the steps of structure designing means for

designing a system structure in such a manner that noun objects and verb objects (col.

col. 9 lines 35 – 55) that compose the object network correlate with data paths as

keywords of the system structure.

14.   **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Cheng, US patent no. 6,067,548 in view of Immerman, US patent no. 6,574,617,

and further in view of the admitted prior art (APA) pages 1 – 3.

15.   **As to claim 9,** Cheng and Immerman do not teach the steps of

        a WELL system as software using the object network and the common platform;

and software exporting means for exposing the WELL system to another software

        The APA teaches a WELL system (well, page 3).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teaching of Cheng, Immerman, and the APA's

system because the APA"s WELL system is also a window based system and would

provide an user-friendly system for Cheng's enterprise application.

Conclusion

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Phuong N. Hoang whose telephone number is (703)

605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30

pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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Business Center (EBC) at 866-217-9197 (toll-free).

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